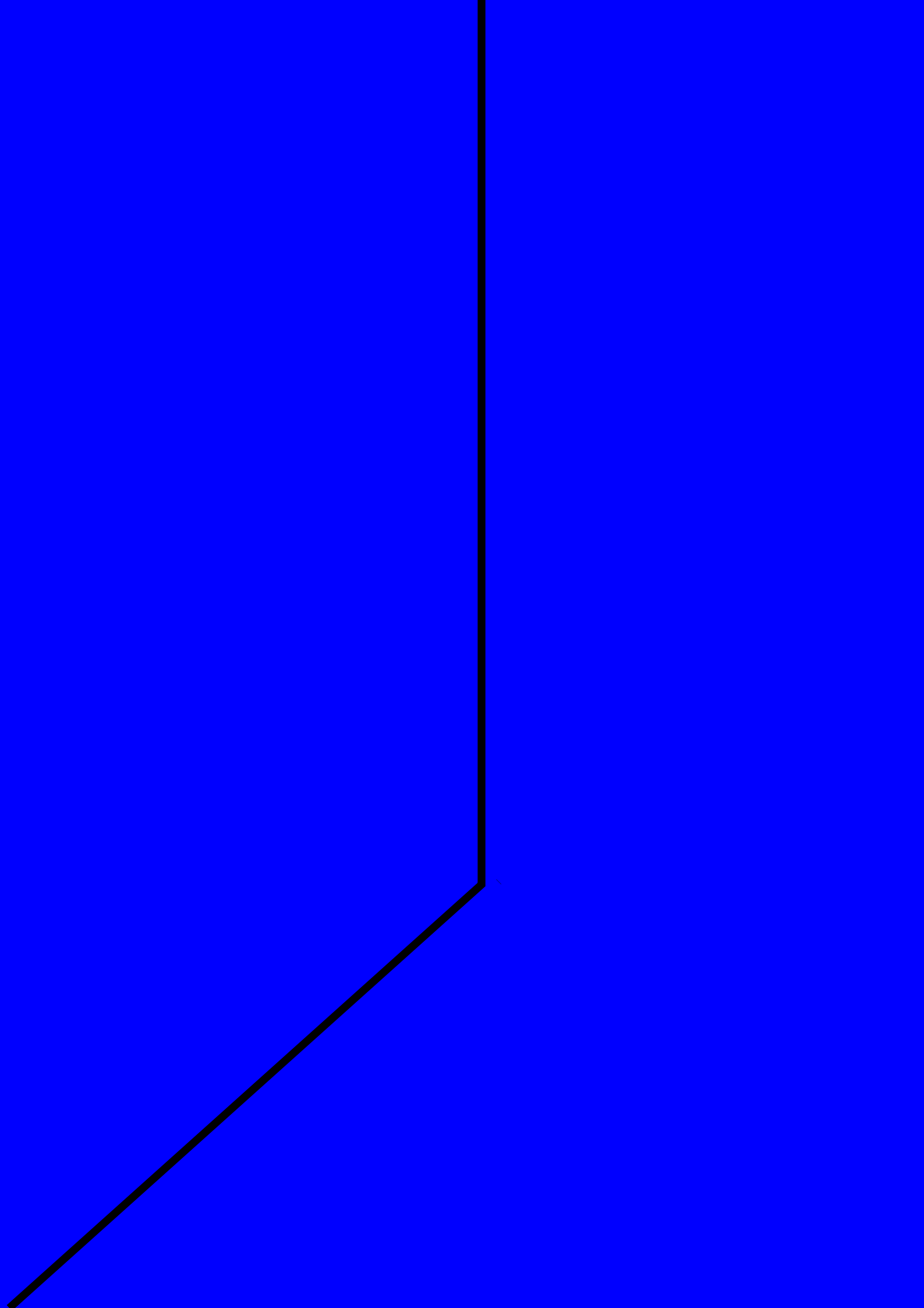


**Electrical Optical Characteristics at Ta=25**

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|---|---|---|---|---|---|---|
| Radiant Intensity | Ie | 8.8 | 12 | --- | mW/sr | $I_F$=20mA (Note 1,3) |
| | | 21 | 30 | --- | mW/sr | $I_F$=50mA (Note 1,3) |
| Viewing Angle(X) | $2\theta_{1/2}$ | --- | 105 | --- | Deg. | (Note 2) |
| Viewing Angle(Y) | | --- | 50 | --- | | |
| Peak Wavelength | λp | --- | 940 | --- | nm | $I_F$=50mA |
| Spectral Line Half- Width | λ | --- | 50 | --- | nm | $I_F$=50mA |
| Forward Voltage | $V_F$ | --- | 1.35 | 1.60 | V | $I_F$=50mA |
| Reverse Current | $I_R$ | --- | --- | 10 | μA | $V_R$=5V |

**Note:**

1. Point sources of the amount of radiation per unit time in a given direction within the unit solid Angle radiated energy.
2. $\theta_{1/2}$ is the off-axis angle at which the Radiant Intensity is half the axial Radiant Intensity.
3. The Ie guarantee should be added ±15% tolerance.

## Radiant Intensity Bin Code (IF=50mA)

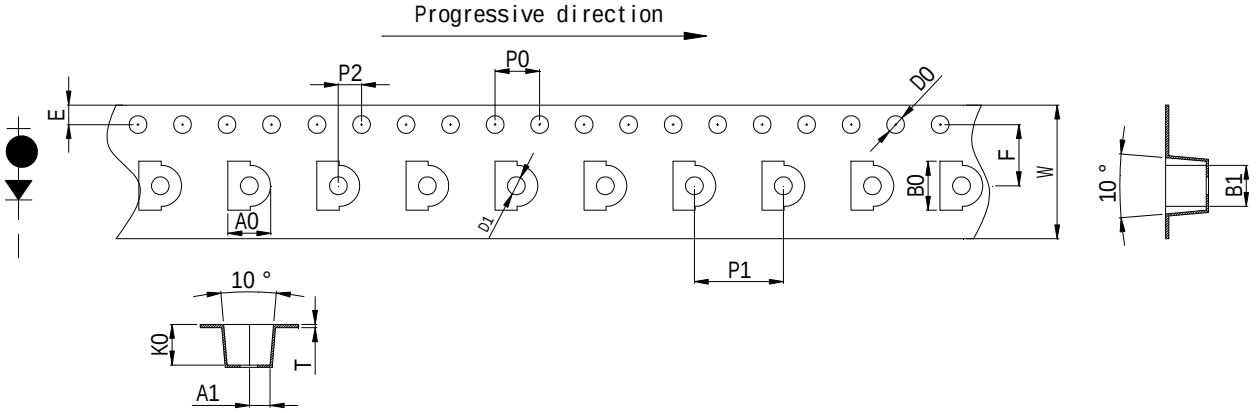
| BIN CODE | Min. (mW/sr) | Max. (mW/sr) |
|---|---|---|
| **31** | 21 | 26 |
| **32** | 26 | 31 |
| **33** | 31 | 37 |
| **34** | 37 | 44 |
| **35** | 44 | 53 |

**NOTE**: The Ie guarantee should be added ±15% tolerance.

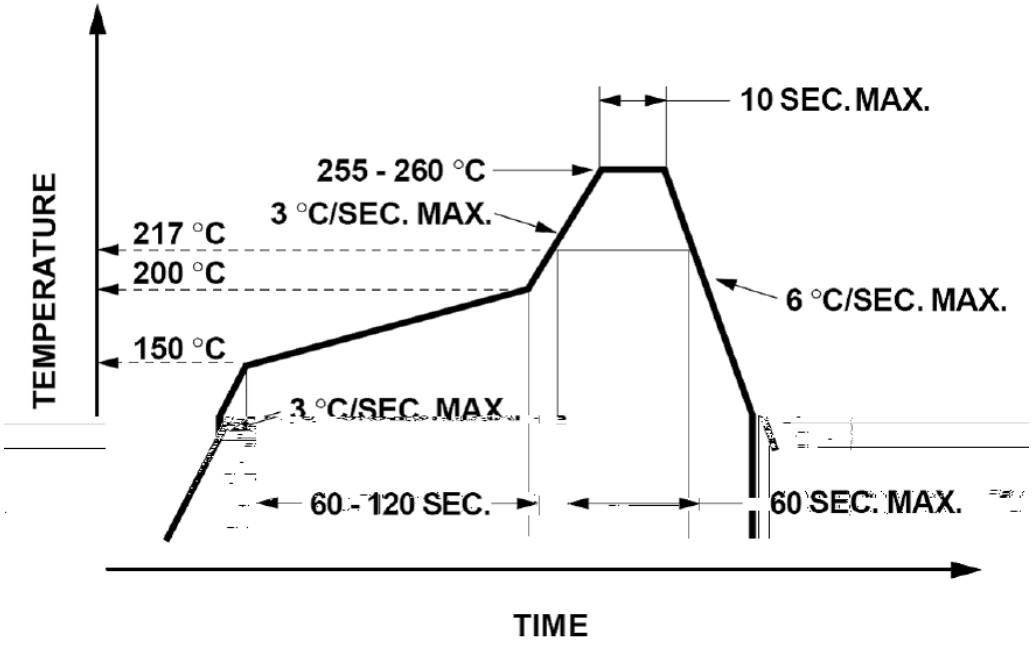
## Label Explanation

## Carrier Tape Specifications (Loaded Quantity: 2300pcs/reel)

| ITEM | W | A0 | A1 | B0 | B1 | K0 | E | F | D0 | D1 | P0 | P1 | P2 | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DIM | 12.00 | 3.85 | 1.85 | 4.40 | 3.70 | 3.65 | 1.75 | 5.50 | 1.50 | 1.60 | 4.00 | 8.00 | 2.00 | 0.30 |
| TOLE | +0.30 -0.30 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.10 -0.10 | +0.05 -0.05 |



## Suggest IR Reflow Condition For Lead Free




1. Reflow soldering should not be done more than two times.
2. When soldering, do not put stress on the LEDs during heating.

## Soldering iron

1. When hand soldering, the temperature of the iron must less than 300℃ for 3 seconds.
2. The hand solder should be done only once.

## Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of LEDs will or will not be damaged by repairing.